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| 10/042,503      | 01/09/2002  | Daniel S. Lowen      | AUS920010643US1     | 6723             |

7590

07/27/2005

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EXAMINER

LE, DIEU MINH T

ART UNIT

PAPER NUMBER

2114

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/042,503

Applicant(s)

LOWEN ET AL.

Examiner

Dieu-Minh Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2005.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 09 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

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1. This Office Action is response to the communication filed on 05/04/05 in application 10/042,503.

2. Claims 1-18 are presented for examination.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered

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therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (U.S. Patent 6,718,489 hereafter referred to as Lee).

As per claim 1:

Lee explicitly teach the invention. Lee teaches:

- A method of error retention for multi-threaded software, [abstract, col. 1, lines 53-57, col. 2, lines 3-4, col. 9, lines 3-17, and col. 12, lines 50-54] comprising:
  - executing an application which uses a logger that collects log statement [col. 2, lines 11-12, col. 5, lines 58-59, col. 8, lines 40-43, and col.. 9, lines 12-17];
  - collecting at least one log statement from at least one application thread and storing the at least one log

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statement in memory, and [col. 2, lines 11-12, col. 12, lines 55-56];

- allowing the collected log statement to be persisted in case on an error in a production environment [col. 1, lines 54-57, col. 7, lines 16-20].

Lee does not explicitly teach:

- a retention level indicator.

However, Lee does disclose capability of:

- An automatic fault management system of computer network [abstract, fig. 9, col. 1, lines 15-19] comprising:

- a connectivity among software fault detection, configuration database, monitoring unit, event log, etc... [fig. 9, col. 6, lines 38-64];

- *log monitor thread used for monitoring the event log, system log for warning report (or indicator), event log monitored by ESR generator, event log ID monitoring, event log threshold monitoring [col. 5, lines 3-7, lines 58-59; col. 6, lines 58-64; col. 7, lines 55-65; col. 11, lines 46-65 ]*.

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Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention was made to realize Lee's *log monitor thread used for monitoring the event log, system log for warning report (or indicator), event log monitored by ESR generator, event log ID monitoring, event log threshold monitoring* as being the retention level indicator as claimed by Applicant. This is because Lee explicitly deals with the software failure fault tolerant and management. Therefore, data collection, detection, and correction processes are clearly used and applied therein based on the event log and its threshold indication (i.e., retention level indicator). It is further obvious because Lee explicitly illustrate the retention level indicator via its "Event Log Monitor Thread" feature in supporting the software error detection and correction process. [col. 12, lines 49-62].

As per claim 2 :

Lee further teaches:

- the application and logger are implemented on a web application server [col. 2, lines 48-50].

As per claim 3:

Lee further teaches:

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- the executing application is run in a development environment [fig. 1A, col. 7, lines 38-47].

As per claim 4:

Lee further teaches:

- the executing application is run in a test environment [fig. 6, col. 13, lines 3-7].

As per claim 5:

Lee further teaches:

- the logger is built into a base class of an object oriented application framework (i.e., Electronic service Request (ESR) objects described in [fig. 9, col. 3, lines 27-31 and col. 5, lines 12-15].

As per claim 6:

Lee further teaches:

- the production application is an internet accessible application [col. 2, lines 48-50 and col. 3, line 39].

As per claim 7:

Lee further teaches:

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- the method can be implemented using background threads  
[col. 2, lines 3-4 and col. 12, lines 50-53].

As per claim 8:

Lee further teaches:

- detecting a death of an application thread by the logger  
[col. 4, lines 55-59 and col. 8, lines 46-50];
- deleting the application thread's log statements after  
thread death [col. 13, lines 3-7].

As per claims 9-10:

Due to the similarity of claims 9-10 to claims 1 and 8, except for a system of error retention for multi-threaded software comprising executing application means, collecting log statement means, allowing the collected log statement means, etc... instead method of error retention for multi-threaded software comprising executing application, collecting log statement, allowing the collected log statement, etc...; therefore, these claims are also rejected under the same rationale applied against claims 1 and 8. **In addition, all of the limitations have been noted in the rejection as per claims 1 and 8.**

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As per claims 11-18:

These claims are the same as per claims 1 - 8. The only minor different is that this claim is directed to **computer-readable medium** instead of method of error retention for multi-threaded software comprising executing application, collecting log statement, allowing the collected log statement as described in claims 1-8. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to realize that a **computer-readable medium** is a necessary item for such the storage device. Since the storage device obviously needs a means for instruction or code means resided within the computer program media for performing the data execution, data logging, data access, etc.. Therefore, these claims are also rejected under the same rationale applied against claims 1-8.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (571) 272-3660. The examiner can

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normally be reached on Monday - Thursday from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The Tech Center 2100 phone number is (571) 272-2100. The Central FAX number is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**DIEU-MINH THAI LE  
PRIMARY EXAMINER  
ART UNIT 2114**

DML

7/19/05